

# Highlights of the NIOSH Health Hazard Evaluation of Indoor Environmental Quality

The National Institute for Occupational Safety and Health (NIOSH) evaluated various health problems (including sinus infection, respiratory problems, eye irritation, and burning in the chest and nose) and their possible relationship to environmental factors in the U.S. Department of the Interior (DOI) Main Building in Washington, D.C.

## What NIOSH Did

- We interviewed thirteen employees, including all employees from the 6<sup>th</sup> floor with known symptoms.
- We studied air movement in and around the building.
- We collected surface dust samples of soot.
- We collected cooling system water samples to look for microbial contamination.
- We checked mechanical drawings, available consultant reports, Material Safety Data Sheets, and other documents related to building environmental quality.

## What NIOSH Found

- Employees reported a variety of symptoms.

- Air washer and cooling tower water treatment chemicals could cause some of the employees' symptoms.
- The cooling tower contained *Legionella pneumophila*.
- Air washer reservoirs contained bacteria, but not *L. pneumophila*.
- Since smoke from the food smoker is exhausted on the roof, it could enter the ventilation system through the outdoor air intakes.

## What U.S. Department of the Interior Managers Can Do

- Carefully disinfect water reservoirs twice a year.
- Make the kitchen exhaust discharge stack on the roof higher and add an extra fan on the roof to increase the velocity of the exhaust.
- Consider replacing the heating and air-conditioning system to eliminate the air washer reservoirs.



**What To Do For More Information:**  
We encourage you to read the full report. If you would like a copy, either ask your health and safety representative to make you a copy or call 1-513/841-4252 and ask for HETA Report # 99-0324

